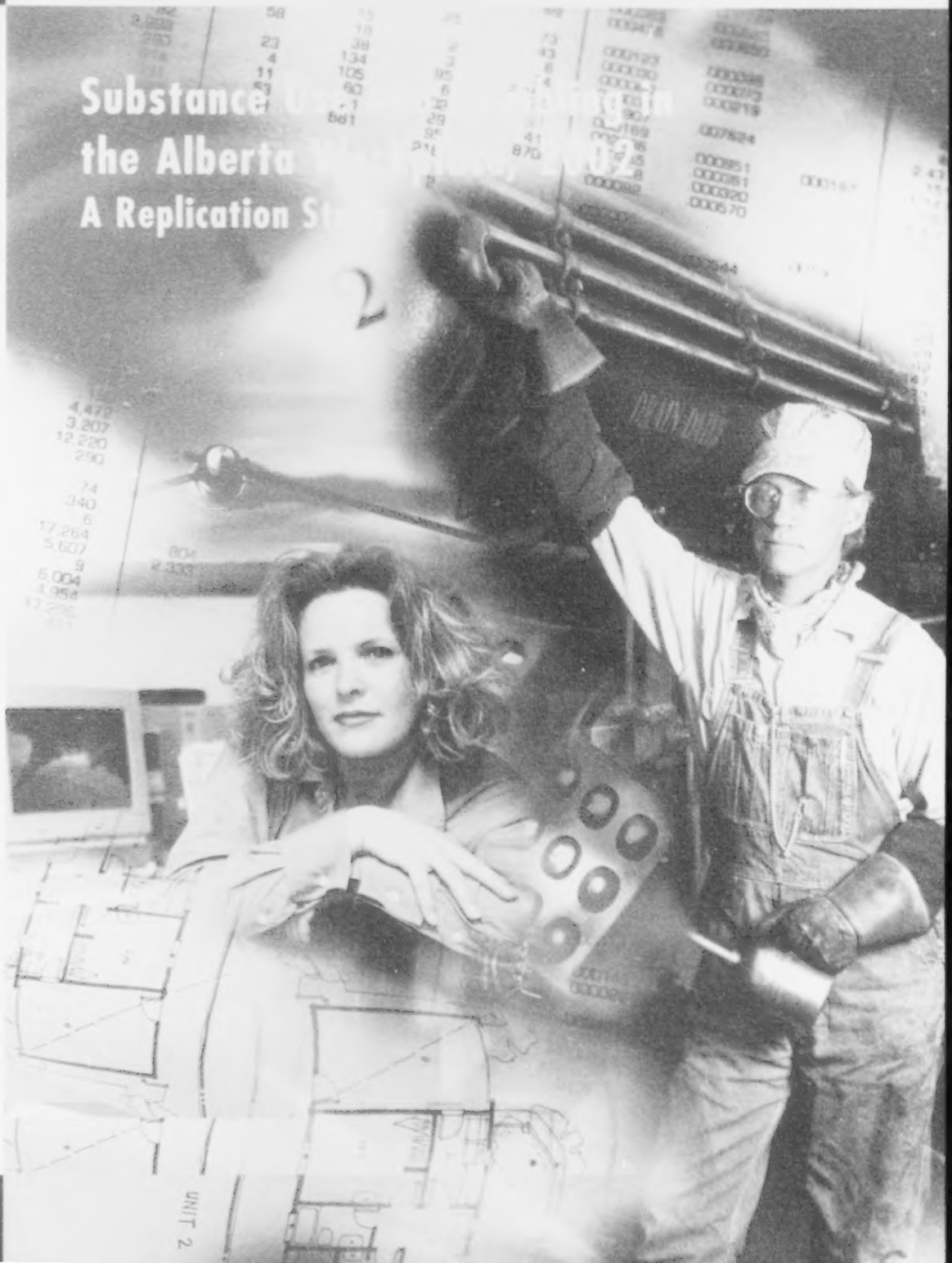
# SUMMARY REPORT



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*Report prepared by AADAC Research Services, 2003*

In addition to this Summary Report of the *Substance Use and Gambling in the Alberta Workplace, 2002: A Replication Study*, a detailed Technical Report prepared by R. A. Malatest & Associates Ltd. is available covering the methodology for the study and analysis of all the information collected.

# EXECUTIVE SUMMARY

The Alberta Alcohol and Drug Abuse Commission (AADAC) conducted *Substance Use and Gambling in the Alberta Workplace, 2002: A Replication Study*, to provide current information on substance use and gambling in the Alberta workplace. The study was based on similar research undertaken by AADAC in 1992. A total of 2,836 workers in the Alberta labour force, 755 employers and 88 union representatives participated in the current study and provided information about the prevalence and patterns of substance use and gambling among Alberta workers, environmental work factors associated with substance use and gambling, impacts and costs, as well as responses and reactions to mitigate the impact of harmful substance use and problem gambling in the workplace.

*Prevalence and patterns of alcohol use among Alberta workers remained relatively unchanged between 2002 and 1992.*

- The proportion of Alberta workers who reported that they had consumed alcohol within the last 12 months was virtually unchanged (81% compared to 80% in 1992).
- Drinking of alcohol was less frequent among those who reported drinking. More workers were infrequent drinkers (27% compared to 19% in 1992) and fewer workers were occasional drinkers (26% compared to 34% in 1992).
- All other drinker profiles by frequency and consumption level remained unchanged (e.g., non-drinkers and heavy drinkers).
- Ten per cent reported at-risk drinking, according to results from the Alcohol Use Disorders Identification Test (AUDIT).
- One in 10 workers (11%) or approximately 184,118 Alberta workers reported using alcohol while at work during the previous 12 months.
- Above average rates of alcohol use were reported by workers in the utilities, public administration and forestry/mining industries. Above average reports of alcohol at work were reported by workers in other services and finance/insurance/real estate industries. Above average at-risk drinking was reported among workers in the construction and wholesale/retail trade industries and the construction occupation.

*Prevalence and patterns of illicit drug use among Alberta workers also remained relatively unchanged.*

- Ten percent of workers reported using drugs other than alcohol in the past 12 months, a slight increase since 1992 (up from 6%).
- Cannabis use increased; other illicit drug use did not.
- Moderate and substantial problem drug use (2.5%), as indicated by responses to the Drug Abuse Screening Test (DAST), was low.

- Drug use at work (1%) was infrequent. It is estimated that 16,738 Alberta workers used drugs while at work.
- While there was little variation in illicit drug use by industry and occupation, above average rates of drug use were reported by workers in the construction industry and the construction occupation.

*Medications were used by many Alberta workers but not daily.*

- While a significant proportion of workers had used medications (88%) in the previous 12 months, few workers surveyed in 2002 used medications daily.
- The most popular medication used was over-the-counter painkillers (74%) followed by cough/cold/sinus/allergy medication (59%). Few workers used over-the-counter stimulants (2%).
- There was little variation in medication use by industry and occupation.

*New data were gathered for tobacco use among Alberta workers.*

- The study suggested that about 30% of workers in the paid labour force had used tobacco (cigarettes, cigars, smokeless tobacco) at some time in the previous month.
- Cigarettes were the most commonly used type of tobacco.
- One-quarter of Alberta workers (27%) smoked cigarettes daily.
- One in 10 workers (13%) reported moderate or heavy smoking.
- Less than one-quarter (22%) of workers, for an estimated total of 368,236 people, used tobacco while at work.
- Above average rates of tobacco use were reported by workers in the upstream oil/gas and wholesale/retail trade industries, and in the materials handling, processing, services and sales occupations. Higher than average rates of tobacco use and moderate/heavy smoking were reported by workers in the construction and transportation industries and the construction and transportation equipment-operating occupations.

*New baseline data were gathered for gambling among Alberta workers.*

- A significant proportion of workers had engaged in a gambling activity (66%) in the previous 12 months of 2002. Problem gambling, as per the Canadian Problem Gambling Index (CPGI), was 1%. This rate was consistent with problem gambling among the general population.
- One-third (30%) of workers reported gambling at work. It is estimated that 502,140 workers gambled while at work.
- Above average rates of gambling were reported by workers in the forestry/mining, utilities, finance/insurance/real estate, hospital/health care, and public administration industries and the clerical/office and materials handling occupations.

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*Environmental work factors in the Alberta workplace changed over time.*

- Alcohol was less available in the worksite.
  - Fewer workers reported that alcohol is permitted on premises at work (19% compared to 56% in 1992), served at organization functions (75% down from 90% in 1992) or permitted on the premises during special occasions (48% down from 59% in 1992).
  - Fewer workers drank during lunch (11% down from 28%) or after work (75% down from 83%).
- Alcohol was still available near the workplace (61% compared to 56% in 1992) and invitations to employees to drink by co-workers (45% up from 37% in 1992) and supervisors (21% up from 6% in 1992) had increased.
- More workers reported street drug availability near the workplace (26% compared to 20% in 1992).
- Most workers (90%) disagreed that street drug use at work was socially acceptable.

*Employers and unions reported continued concerns, impacts and costs regarding employee substance use.*

- Tobacco use (32%) outranked alcohol (20%), illicit drugs (13%) and gambling (9%) as an employer concern for their organization in 2002.
- Employer concerns about alcohol (20% up from 10% in 1992) and illicit drugs (13% up from 7% in 1992) for their organization increased in 2002.
- Employers and unions differed in their concerns about the impact of employee substance use.
  - Employers were concerned about the impact on their organization's reputation (34%) and public image (33%); unions were concerned about the impact on employee (77%) and co-worker (74%) safety.
  - Few employers reported that they were concerned about the impact of gambling on the organization (14%).
- Missing work, arriving late for work and/or working at less than 50% capacity were the most common problems associated with employee alcohol use (1%) or illicit drug use (0.2%) reported by employers.
- Few employers (1%) or unions (1%) reported awareness of incidents during the previous month in which employee alcohol or illicit drug use resulted in employee injuries and/or injuries to co-workers or others.
- It is estimated that in 2002 the Alberta workforce missed approximately 4 million hours from work, the equivalent of $74 million, due to lost production associated with gambling or the use of alcohol or illicit drugs. This estimate is not comprehensive.
  - Alcohol use ($51 million) among employees was substantially more costly to employers than illicit drugs ($15 million) or gambling ($7 million).

*Organizational responses and programs to address employee substance use changed over time.*

- Responses to employees requiring treatment for substance use varied.
  - Employers were more likely to offer short-term leave without pay (50%), while unions were more likely to report that their members receive sick leave with full pay (51%).
  - Employers were less likely to dismiss an employee (11% down from 20% in 1992).
  - Organizations with the most employees, highest operating budgets and with headquarters located outside of Canada were more likely to offer sick leave with partial or full pay.
- Employee assistance programs (EAPs) increased in availability as reported by employers (28% up from 9% in 1992).
  - Employees (92%) and unions (83%) considered EAPs effective in dealing with substance abuse/gambling issues.
  - EAPs were thought to be effective in addressing substance abuse by those most likely to use them (92% of drinkers and 86% of drug users).
  - Larger organizations were more likely than smaller organizations to provide EAPs.
  - Employers reported not providing EAPs because they thought their organization was too small (59%) or they did not need one (54%).
- Formal policies changed and became more common in 2002.
  - Employer reports of formal policies increased for alcohol (61% up from 26% in 1992) and illicit drugs (60% up from 26% in 1992).
  - Policies on alcohol (61%) and illicit drugs (60%) were more common than policies on tobacco use (50%) or gambling (11%).
- Alcohol and illicit drug testing increased.
  - More employers reported that their company had an alcohol or drug-testing program (8% up from 1% in 1992).
  - In 2002, more union representatives reported that alcohol or drug testing was conducted in workplaces where they had members (29% up from 5% in 1992).
  - Of the 8% of employers who reported using testing, one-third thought it was effective for alcohol use problems (32%) and drug use problems (37%) in the workplace.
  - Drug testing was more likely to occur in safety-sensitive industries.
- Suggested responses to employee substance use varied.
  - Employers were more likely to focus on prevention strategies while unions were more likely to focus on treatment strategies.
  - Respondents reported that both employers and employees should be involved in addressing substance use in the workplace.

### *Concluding Points*

- The Alberta workforce was relatively healthy in 2002 with regard to substance use and gambling. Reported prevalence and at-risk use for alcohol, illicit drugs and problem gambling were consistent with general population rates.
- Prevalence and patterns of alcohol and illicit drug use changed little since 1992. New data on gambling provides an important baseline measure. While gambling did not appear to be of concern to employers, tobacco use emerged as an issue of concern.
- Industry and unions have shown leadership in taking on the challenge of addressing impacts of substance use since 1992 by implementing policies and practices, the effectiveness of which are evident in changing workplace norms and increasing availability of programs and supports. Opportunities exist for further change, such as exploring supports for small businesses.
- Although substance abuse and problem gambling are not widespread, for a minority of workers in the Alberta labour force these activities constitute a significant problem, and for employers they comprise an important issue with considerable associated economic costs. Results of this study speak to the need for ongoing monitoring of substance use and gambling issues within an ever-changing economy. Sustained vigilance and continued collaborative efforts may serve as guiding principles toward supporting the health, safety and productivity of Alberta workers.

# INTRODUCTION

In 2002, the Alberta labour force consisted of over 1.7 million people and had the highest worker productivity and productivity growth rate in Canada.[1] Alberta had the highest workforce participation rate (72%) in Canada as well as the highest employment rate (69%) and the lowest unemployment rate (5%). Alberta's unionization rate was among the lowest in Canada (24%).[2] The Alberta government's Economic Development Strategy identified a number of goals and objectives to continue to enhance Alberta's economy and included ministries, business, industry, communities, other governments/public institutions, employees and other stakeholders.[3]

Experience and research has led to recognition that substance use has important impacts on the health and performance of the workforce.[4] Identifying and dealing with the impacts of substance abuse and problem gambling in the workplace include, but are not limited to, employee attendance, company productivity, company health care costs and safety at the workplace. Many Albertans, industry representatives and employers in particular, believe that substance abuse represents a major problem that has the ability to compromise the safety and productivity of all Alberta workplaces. Reflecting this conviction, various measures to address perceived workplace alcohol and drug problems have been introduced, ranging from offering employee assistance programs (EAPs) to mandatory alcohol and drug testing. Since the strength of the Alberta economy is tied to the health and productivity of the workforce,[5] actions to deal with workplace substance abuse and problem gambling must be based on reliable and current information.

## SURVEY APPROACH

In 1992, a major study led by AADAC examined substance use in the Alberta workplace.[6] The study surveyed employees, employers and union representatives and provided considerable insight into the prevalence of substance use, by type and frequency, as well as demographic and occupational factors associated with substance use. The employer and union surveys focused on the consequences of substance use, as well as programs and policies in place to mitigate substance use problems.

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1 Alberta Economic Development. (2002). Facts on Alberta.
2 Alberta Economic Development, 2002.
3 Alberta Finance. (2003). Government Business Plan 2003-06. Edmonton, AB: Government of Alberta.
4 Single, E. (1998). Substance Abuse and the Workplace in Canada. Toronto, ON: Health Canada; Ames, G. M., & Grube, J. W. (1999). Alcohol Availability and Workplace Drinking: Mixed Method Analyses. Journal of Studies on Alcohol, 60, 383-393; Gerber, J. K., & Yacoubian, Jr. G. S. (2002). An Assessment of Drug Testing Within the Construction Industry. Journal of Drug Education, 32(1), 53-68.
5 Lowe, G. S. (2003). Healthy Workplaces and Productivity: A Discussion Paper. Ottawa, ON: Minister of Public Works and Government Services Canada.
6 Price Waterhouse. (1992). Substance Use and the Alberta Workplace: The Prevalence and Impacts of Alcohol and Other Drugs. Edmonton, AB: Alberta Alcohol and Drug Abuse Commission.

While the 1992 research provided a significant new base of knowledge at the time, more up-to-date information was required. AADAC commissioned a 10-year follow-up survey, *Substance Use and Gambling in the Alberta Workplace, 2002: A Replication Study*, to provide current information and trend data on substance use and gambling in the Alberta workplace.

Comparisons between 1992 and 2002 allow for identification of significant changes in alcohol and illicit drug use that have occurred during this period. The results form a baseline for future monitoring of trends and demonstrate the feasibility of creating an ongoing monitor of substance use in the workplace. In addition, the 2002 study provides important new information on the prevalence and impacts of tobacco use and gambling in the workplace.

The most important outcome of the 2002 study is the availability of current information. Information collected in the study assists Alberta employers, government and other stakeholders to continue to develop reliable responses to workplace issues related to substance use and gambling and will guide the ongoing development of substance abuse prevention and treatment programs for Alberta workers. The key research objectives of the study were to

- estimate the prevalence and identify patterns of gambling and the use of alcohol, illicit drugs, medication and tobacco among Alberta workers
- identify environmental work factors related to substance use and gambling in the workplace
- explore impacts, costs and the perceived seriousness of substance use and gambling
- identify responses and programs used to mitigate the impacts of substance use and gambling in the workplace

## METHODOLOGY

A total of 2,836 adults in the paid labour force, 755 employers and 88 union representatives participated in *Substance Use and Gambling in the Alberta Workplace, 2002: A Replication Study*. Data for the employee survey was obtained through telephone interviews with a random and representative sample of adult workers in the Alberta economy based on age, region and job status. The employer sample was representative of Alberta employers by employer size and industry. The entire population of union representatives was surveyed. Employers and union representatives were initially mailed the surveys for completion. Telephone follow-up was then used to obtain the required number of survey completions from employers and union representatives. Results for the 2002 *Employee Survey* are accurate within plus or minus 1.8%, 19 times out of 20, while results for the *Employer Survey* are accurate within plus or minus 3.6%, 19 times out of 20.

The 2002 replication study differed from the 1992 research by

- using standardized measures to identify problem substance use and to compare to other research
  - Alcohol Use Disorders Identification Test (AUDIT)
  - Drug Abuse Screening Test (DAST)
  - Canadian Problem Gambling Index (CPGI)

- measuring substance use rates for alcohol, illicit drugs, medication and gambling over the previous 12 months rather than during a four-week period to allow comparison to other research
- creating a set of drinker profiles using alcohol frequency and consumption levels to allow comparison to 1992 data
- adding additional questions about tobacco use and smoking
- having employees respond to pre-selected sections of the survey regarding substance use to reduce the length of the survey (1,890 respondents to the alcohol section, 1,891 respondents to the illicit drug/medication section, 1,890 respondents to the tobacco section, 1,891 respondents to the gambling section of the survey)
- surveying employees who were 18 years of age and older rather than ages 15 and over
- including employers with five or more employees to ensure that the sample was representative of Alberta's employers based on employer size
- using 1992 lists and open-ended questions to create codes for occupation and industry categories, which have changed since 1992 and which will allow future comparisons to the NOC[7] and the NAICS/SIC[8] 2002 categories

To assist in the research, AADAC established an Advisory Committee that included government, business and labour representatives from the Alberta Workers' Compensation Board, Alberta Workers' Health Centre, Canadian Federation of Independent Business, Construction Owners Association of Alberta, and Alberta Human Resources and Employment (see Appendix A for a list of Advisory Committee members).

In addition to this summary report of the *Substance Use and Gambling in the Alberta Workplace, 2002: A Replication Study*, a detailed **technical report** prepared by R.A. Malatest & Associates Ltd. is available covering the methodology for the study and analysis of the information collected.

7 National Occupation Classification

8 North American Industry Classification System 2002 Standard Industrial Classification

# PREVALENCE AND PATTERNS OF SUBSTANCE USE AND GAMBLING

Prevalence rates and patterns of substance use among the Alberta workforce were measured from information provided by employees regarding alcohol, illicit drugs, medication, tobacco use and gambling.

## ALCOHOL USE

The following tables report alcohol prevalence among Alberta workers during the previous 12 months by frequency and consumption levels for 2002 and 1992, at-risk drinking using the Alcohol Use Disorders Identification Test (AUDIT) and alcohol use at work. In total, 1,890 employees were asked about alcohol use.

**TABLE 1: ALCOHOL USE AMONG ALBERTA EMPLOYEES: 2002 AND 1992**

| YEAR | ALCOHOL USE IN PAST YEAR | FREQUENCY AND CONSUMPTION LEVELS | | | | | |
|---|---|---|---|---|---|---|---|
| | | Non-drinker | Infrequent | Occasional | Regular/Light | Regular/Moderate to Heavy | Very Heavy |
| 2002 | 81% | 19% | 27% | 26% | 15% | 9% | 5% |
| 1992 | 80% | 20% | 19% | 34% | 14% | 8% | 5% |

**TABLE 2: ALCOHOL USE DISORDERS IDENTIFICATION TEST (AUDIT): 2002**

| Non-Drinkers | AUDIT PROFILES | | | |
|---|---|---|---|---|
| | Low Risk Drinker | Medium Risk Drinker | High Risk Drinker | Very High Risk Drinker |
| 20% | 70% | 9% | 1% | 0.1% |

**TABLE 3: ALCOHOL USE AT WORK: 2002**

| USE AT WORK IN PAST YEAR | Yes | Less than 1 time per month | 1-3 times per month | Once a week | 2-3 times a week | 4+ times a week |
|---|---|---|---|---|---|---|
| While at work | 11% | 8% | 1% | 1% | 1% | 0.3% |
| Within 4 hours of coming to work | 4% | 3% | 1% | 1% | 0.2% | 0.1% |

- Alcohol was the most frequently used substance with virtually no change to the prevalence rate since 1992.
  - Four out of five Alberta workers (81% in 2002; 80% in 1992) reported using alcohol at least once during the previous 12 months.
  - In comparison, the prevalence rate among all Albertans has decreased in 2002 (77%) from 1989 (82%).[9]
- Frequency (how often a person drinks) and consumption (how many drinks are consumed) level measures show that while the prevalence rate has not changed since 1992, the profile of certain drinkers has changed.
  - More workers were infrequent drinkers – drinking monthly or less with no heavy drinking (27% compared to 19% in 1992) and fewer workers were occasional drinkers – drinking two to four times per month with no heavy drinking (26% compared to 34% in 1992).
  - The prevalence of non-drinkers and very heavy drinkers (drinking at least once a week and 14 or more drinks/week) has not changed since 1992.
- Alcohol Use Disorders Identification Test (AUDIT) profiles were created from employee responses to 10 questions that were asked only of those who reported using alcohol in the past 12 months.
  - The majority of Alberta employees who reported alcohol use did not report signs of harmful drinking (70%).
  - Approximately one in 10 (10%) engaged in at-risk drinking behaviour (medium to very high risk drinkers). At-risk drinking includes hazardous or harmful drinking that encompasses high levels of drinking each day, repeated drinking to intoxication, drinking that causes physical or mental harm, or drinking that causes the person to become dependent. This rate is consistent with that found in the Canadian population.[10]
  - Very few (1%) Alberta workers are at risk for probable alcohol dependence (high risk and very high risk drinkers).
- In 2002, one in 10 workers (11%) reported using alcohol at work during the previous 12 months. It is not possible to make direct comparisons for the rate of alcohol consumption while at work for 1992 due to measurement changes. In 1992, workers were asked about alcohol use at work for a one-month period only (6%).
  - It is estimated that 184,118 Alberta workers had consumed alcohol at work during the previous 12 months in 2002.
  - The majority of those who use alcohol while at work did so less than once a month.

9 Statistics Canada. (2002). Canadian Community Health Survey 2000/01. Ottawa, ON: Statistics Canada.
10 Health Canada. (1997). Canada's Alcohol and Other Drugs Survey 1994. Ottawa, ON: Health Canada.

## ILLICIT DRUG USE

The following tables show illicit drug use prevalence rates among Alberta workers by type of drug use for 2002 and 1992, at-risk drug use with the Drug Abuse Screening Test (DAST), as well as illicit drug use at work. A total of 1,891 employees responded to questions about drug use.

### TABLE 4: ILLICIT DRUG USE AMONG ALBERTA EMPLOYEES: 2002 AND 1992

| ILLICIT DRUG USE IN PAST YEAR | 2002 | 1992 |
|---|---|---|
| | 10% | 6% |

| TYPE OF ILLICIT DRUG USE | 2002 | 1992 |
|---|---|---|
| Cannabis (marijuana/hash) | 10% | 6% |
| Cocaine/crack | 1% | 1% |
| LSD/PCP/other hallucinogens | 1% | 1% |
| Amphetamines/other stimulants | 1% | N/A |
| Heroin/other opiates | 0% | 0% |
| Other street drugs | 0.2% | 0.4% |

### TABLE 5: DRUG ABUSE SCREEN TEST (DAST): 2002

| No Drug Use | DAST PROFILES | | | |
|---|---|---|---|---|
| | No Problem Drug Use | Low Problem Drug Use | Moderate Problem Drug Use | Substantial Problem Drug Use |
| 90% | 3% | 5% | 2% | 0.4% |

### TABLE 6: ILLICIT DRUG USE AT WORK: 2002

| USE AT WORK IN PAST YEAR | Yes | FREQUENCY OF OCCURENCE | | | | |
|---|---|---|---|---|---|---|
| | | Less than 1 time per month | 1-3 times per month | Once a week | 2-3 times a week | 4+ times a week |
| While at work | 1% | 0.3% | 0.3% | 0.1% | 0.1% | 0.3% |
| Within 4 hours of coming to work | 2% | 1% | 0.2% | 0.2% | 0.2% | 0.3% |

- The vast majority of Alberta employees (90%) reported never having used illicit drugs in the previous 12 months.
- Cannabis was the most commonly used illicit drug (10%).
  - Reported use increased (up from 6% in 1992).

- Cannabis prevalence in the general Alberta population was 8% in 1994[11].

- All other illicit drug use has remained very low over the 10-year period (1% or less).
- Drug Abuse Screening Test (DAST) profiles were created from employee responses to 10 questions that were asked only of those who reported using drugs in the past 12 months. Among the 10% of Alberta workers who indicated they used illicit drugs in 2002,
  - 3% indicated no problem drug use
  - 5% reported low problem drug use and,
  - 2% engaged in moderate to substantial problem drug use according to DAST scores.
- Very few Alberta workers used drugs while at work (1%) or within four hours of coming to work (2%). In 1992, 0.5% Alberta workers used drugs while at work.
  - It is estimated that in 2002 a total of 16,738 employees used drugs at work during the previous year.
  - Of the 1% who used at work, four in 10 (44%) reported using drugs at work at least once a week.
  - Cannabis was the drug most commonly used at work.

## MEDICATION USE

Table 7 details medication types and frequency of use among Alberta employees. Medication use in 2002 was not compared to 1992 due to changes in methodology. A total of 1,891 employees responded to questions about medication use.

**TABLE 7: MEDICATION USE AMONG ALBERTA EMPLOYEES: 2002**

| MEDICATION USE IN PAST YEAR | YES | NO |
|---|---|---|
| | 88% | 12% |

| MEDICATION TYPE | USED IN THE LAST 12 MONTHS | DAILY USE |
|---|---|---|
| OTC* painkillers (e.g. Tylenol®) | 74% | 3% |
| Cough, cold, sinus or allergy medication | 59% | 3% |
| Prescription painkillers | 15% | 2% |
| Sleeping pills | 7% | 0.7% |
| Tranquillizers (e.g., Ativan®) | 2% | 0.2% |
| OTC* stimulants (e.g., "wake-up" pills) | 2% | 0.1% |
| Anti-depressants/mood stabilizers | 9% | 7% |

*OTC – Over-the-counter

11 Alberta Alcohol and Drug Abuse Commission. (2000). Alcohol and Drug Use in Alberta [Web Page]. URL http://corp.aadac.com/drugs/profiles/alcohol_drug_use.asp [2003, August].

- Most of the working population (88%) had used medications within the past year, however few people used medications on a daily basis.
- The most common medications included over-the-counter painkillers and medications for cough, cold, sinus problems and allergies.
- Prescription painkillers (15%) also had a relatively high rate of use, although only 2% used painkillers on a daily basis.
- Few workers used medications such as tranquillizers, over-the-counter stimulants and sleeping pills.
- Anti-depressants or other mood stabilizers were used by 9% of the workforce. The majority of those who used anti-depressants or mood stabilizers did so on a daily basis, consistent with the requirements of the medication.

## TOBACCO USE

Information on tobacco use in the Alberta labour force was not collected in 1992. Tobacco use prevalence rates as well as types of tobacco use at work were measured in 2002. A total of 1,890 employees responded to questions about tobacco use. Specifically, when asked, "In the past month, have you smoked or used tobacco," less than one-third (30%) reported using tobacco.[12]

**TABLE 8: TOBACCO USE AMONG ALBERTA WORKERS: 2002**

| Non-Tobacco Users | SMOKER PROFILES | | | |
|---|---|---|---|---|
| | Non-daily Smokers | Light Smokers | Moderate Smokers | Heavy Smokers |
| 70% | 3% | 14% | 7% | 6% |

**TABLE 9: TOBACCO USE AT WORK: 2002**

| TOBACCO USE AT WORK IN PAST MONTH | TYPE OF USE AT WORK | | | | |
|---|---|---|---|---|---|
| | Cigarettes | Pipe | Cigar | Snuff | Chewing Tobacco |
| 22% | 96% | 0.2% | 2.2% | 0.5% | 1.7% |

- Most Alberta workers (70%) did not use tobacco during the past month.
- Smoker profiles were created in response to the question, "How many cigarettes do you usually smoke per day?"
  - Over one-quarter of workers smoked cigarettes on a daily basis (27%).
  - One in 10 employees (13%) reported moderate (11–19 cigarettes/day) or heavy (20+ cigarettes/day) smoking.

12 According to the 2002 Canadian Tobacco Use Monitoring Survey, which measured tobacco use by labour force status among Albertans aged 15+ years, 20% of Albertans who were employed in 2002 reported that they were current daily smokers and 6% reported that they were occasional smokers.

- Almost one-quarter (22%) of the workforce had smoked or used tobacco *while at work* within the past month.
  - Cigarettes were the most commonly used type of tobacco at work.
  - It is estimated that 368,236 workers used tobacco while at work in Alberta.

## GAMBLING

Data were collected on gambling among Alberta workers for the first time in 2002, providing important baseline information. As defined in the survey, an individual was classified as a gambler if they had in the past 12 months bought lottery or scratch tickets, played bingo, played slot machines or VLTs, played casino table games, bet on sports/at the racetrack/against other people or participated in Internet gambling. The methodology appears to underestimate non-problem gambling, low-risk gambling and moderate risk gambling compared to other studies. See the following tables for prevalence rates and at-risk gambling behaviour using the Canadian Problem Gambling Index (CPGI) and details about gambling at work. A total of 1,891 employees responded to questions about gambling behaviour.

**TABLE 10: GAMBLING AMONG ALBERTA WORKERS (CPGI): 2002**

| Non-Gamblers | CPGI PROFILES | | | |
|---|---|---|---|---|
| | Non-problem Gambler | Low Risk Gambler | Moderate Risk Gambler | Problem Gambler |
| 34% | 58% | 6% | 2% | 1% |

**TABLE 11: GAMBLING AT WORK: 2002**

| GAMBLING AT WORK IN PAST YEAR | FREQUENCY OF GAMBLING AT WORK | | | | | |
|---|---|---|---|---|---|---|
| | Less than once a month | 1-3 times a week | Once a week | 2-3 times a week | 4-6 times a week | Daily |
| 30% | 19% | 6% | 4% | 2% | 0.2% | 0.2% |

- Two-thirds of employees (66%) reported that they gambled within the past 12 months.
- The Canadian Problem Gambling Index (CPGI) profiles were created using nine questions that were asked only of those who had reported gambling in the previous 12 months.
  - Among those who had gambled, the majority (58%) were occasional gamblers with no problems identified by the CPGI.
  - About 1% of Alberta workers reported problem gambling behaviours. This is consistent with problem gambling rate in the general population.[13]
- One-third of Alberta workers (30%) gambled while at work in 2002.
  - It is estimated that 502,140 workers have gambled at work.
  - Of these, approximately one in five (107,123) gambled weekly.

13 Smith, G. J., & Wynne, H. J. (2002). Measuring Gambling and Problem Gambling in Alberta Using the Canadian Problem Gambling Index. Edmonton, AB: Alberta Gambling Research Institute.

## SUBSTANCE USE AND GAMBLING CORRELATIONS AND PROFILES

- The survey revealed a number of statistically significant correlations related to substance use and/or gambling.
  - Employees who used illicit drugs were also more likely to smoke and drink.
  - Tobacco use was linked to increased probability of gambling and alcohol use.
  - Employees who engaged in at-risk alcohol use were more inclined to use tobacco.
- Problem drinkers were more likely to be never-married males between the ages of 18 and 24. Non-drinkers were more likely to be older married females.
- Problem drug users (moderate and substantial DAST scores) were more likely to be
  - never-married males between the ages of 18 and 24
  - employees with serious problems with depression, anxiety or other mental health problems and/or individuals off work due to health problems or injuries
- Little demographic variation existed for medication use among Alberta workers (e.g., age, gender, marital status).
  - Medications were more likely to be used by people who had been off work due to injury or illness.
- Moderate and heavy tobacco users were more likely to be single males between the ages of 18 and 24. Non-smokers were more likely to be older married females.
- Problem gamblers were more commonly single women and men aged 65 years or older.

## SUBSTANCE USE AND GAMBLING BY INDUSTRY AND OCCUPATION

A number of industries and occupations were identified as having higher than average alcohol and illicit drug use in the 1992 study. Data from the 2002 study identified not only industries and occupations with higher than average use rates for alcohol and illicit drug use but also provided important new information about tobacco use and gambling among industries and occupations.

Tables 12 and 13 detail the ranking of industries and occupations for substance use and/or gambling in 2002. (Please see Appendix B for full details). Rankings were created by comparing employee-reported averages for

1. alcohol prevalence rates; alcohol use at work; at-risk alcohol use (AUDIT)
2. drug use prevalence rates
3. tobacco use prevalence; heavy tobacco use
4. gambling prevalence rates

In addition to prevalence rates for alcohol, illicit drugs, tobacco use and gambling, at-risk substance use and problem gambling were also explored. Given the small number of drug users and problem gamblers in the study, drug use at work, DAST and CPGI by industry and occupation are not

reported. At-risk alcohol use and heavy smokers are reported. Medication use rates were relatively uniform across industries and occupations and are not reported.

Industry and occupation groups reporting *lower than average* substance use and/or gambling are marked using (✓). Those reporting *higher than average* substance use and/or gambling are marked using (**X**). Groups with no marks fell within average reports for substance use and/or gambling.

**TABLE 12: RANKING INDUSTRIES BY SUBSTANCE USE/GAMBLING IN 2002**

| INDUSTRY | Alcohol Prevalence (n-1,890) | Alcohol Use at Work | At Risk Alcohol Use (AUDIT) | Illicit Drug Prevalence (n-1,891) | Tobacco Use Prevalence (n-1,890) | Moderate/ Heavy Smokers | Gambling Prevalence (n-1,891) |
|---|---|---|---|---|---|---|---|
| Construction | | | X | X | X | X | |
| Finance/Insurance/ Real Estate | | X | | | | | X |
| Forestry/Mining | X | | | | | | X |
| Transportation | | | | | X | X | |
| Utilities | X | | | | | | X |
| Wholesale/Retail Trade | | | X | | X | | |
| Public Administration | X | | | | ✓ | | X |
| Other Services | | X | | | | | |
| Upstream Oil/Gas | | | | | X | | |
| Hospitals/Health Care | | | | | ✓ | | X |
| Telecommunications | | | | | | | |
| Manufacturing/Processing | | | | | | | |
| Education | | | | | ✓ | | ✓ |
| Social Services | ✓ | | | | ✓ | | ✓ |
| Agriculture | ✓ | | | | ✓ | | ✓ |
| *Industry Average* | *81%* | *11%* | *10%* | *10%* | *30%* | *13%* | *66%* |

X = Higher than average
✓ = Lower than average

*Please see Appendix B for full details*

**TABLE 13: RANKING OCCUPATIONS BY SUBSTANCE USE/GAMBLING IN 2002**

| OCCUPATION | Alcohol prevalence (n-1890) | Alcohol Use at Work | At-Risk Alcohol Use (AUDIT) | Illicit Drug Prevalence (n-1891) | Tobacco Use Prevalence (n-1890) | Moderate/ Heavy Smokers | Gambling Prevalence (n-1891) |
|---|---|---|---|---|---|---|---|
| Construction | | | X | X | X | X | |
| Materials Handling | ✓ | | | | X | | X |
| Transportation Equipment Operating | | | | | X | X | ✓ |
| Clerical/Office | | | | | | | X |
| Sales | | | | | X | | |
| Services | | | | | X | | |
| Processing | ✓ | | | | X | | |
| Manager/Professional | | | | | ✓ | | |
| Primary Occupations | ✓ | | | | ✓ | | |
| *Occupation Average* | *81%* | *11%* | *10%* | *10%* | *30%* | *13%* | *66%* |

X = Higher than average ✓ = Lower than average

*Please see Appendix B for full details*

## ALCOHOL USE

### *Doing well in 2002:*

- *Industry* – Workers employed in the industrial sectors of social services and agriculture reported lower than average scores for alcohol prevalence rates.
- *Occupation* – Workers employed in the materials handling, processing and primary occupations reported below average scores regarding alcohol use.

### *Higher than average use in 2002:*

- *Industry* – Workers employed in the industrial sectors of utilities, public administration, and forestry/mining reported higher than average alcohol use rates. Workers in industries such as finance/insurance/real estate and other services reported higher than average use at work. Workers in the construction and wholesale/retail trade industries reported higher than average rates of at-risk use. The construction, forestry/mining and utilities industries were identified as having higher than average alcohol use in 1992.
- *Occupation* – Workers in the construction occupation reported higher than average at-risk use. This occupation also reported higher than average rates of alcohol use in 1992.

## ILLICIT DRUG USE

There was little variation in illicit drug use by industry and occupation. However, workers in the construction industry and construction occupation reported higher than averages rates of drug use. The construction industry and occupation also reported higher rates of drug use in 1992.

## TOBACCO USE

*Doing well in 2002:*

- *Industry* – Workers employed in the industrial sectors of social services, education, hospitals/health care, public administration and agriculture reported lower than average rates of tobacco use.
- *Occupation* – Workers employed in the manager/professional and primary occupations reported lower than average rates of tobacco use.

*Higher than average use in 2002:*

- *Industry* – Workers employed in the industrial sectors of wholesale/retail trade, upstream oil/gas, construction and transportation reported higher than average rates of tobacco use. Construction and transportation also reported higher than average rates of moderate/heavy smoking.
- *Occupation* – Workers employed in the materials handling, processing, services and sales occupations reported higher than average rates of tobacco use. Construction and transportation equipment handling also reported higher than average rates of tobacco use and moderate/heavy smoking.

## GAMBLING

*Doing well in 2002:*

- *Industry* – Industries that scored below average on gambling prevalence included social services, education and agriculture.
- *Occupation* – Transportation equipment operating scored below average on gambling prevalence.

*Higher than average use in 2002:*

- *Industry* – Forestry/mining, utilities, public administration, finance/insurance/real estate and hospitals/health care reported higher than average gambling prevalence rates.
- *Occupation* – Materials handling and clerical/office workers reported higher than average gambling prevalence rates.

# ENVIRONMENTAL WORK FACTORS RELATED TO SUBSTANCE USE AND GAMBLING

Just as it is important to have current information regarding prevalence rates and patterns of substance use and gambling in the Alberta workforce, it is necessary to place these behaviours within the context of the environment in which they occur. The survey asked employees, employers and unions about environmental factors associated with substance use and gambling in the workplace, including availability of substances and opportunities to gamble.

## ALCOHOL

- Workplace norms concerning alcohol use changed since 1992. There was a marked decline in the availability of alcohol in the worksite.
  - Fewer employees reported that alcohol was permitted on premises at work (19% in 2002 down from 56% in 1992).
  - Fewer employers reported that alcohol was served at organization functions (75% in 2002; 90% in 1992) or on the premises during special occasions (48% in 2002; 59% in 1992).
- Drinking at lunch (11% down from 28%) and after work (75% down from 83%) also declined since 1992.
- Alcohol was still available near the worksite (61% compared to 56% in 1992).
- Invitations to employees to drink generally increased since 1992
  - by co-workers (45% up from 37%)
  - by supervisor/manager (21% up from 6%)
  - by customer/client (22% up from 16%)
  - by supplier (7% down from 13%)
  - construction, materials handling and sales occupations and the construction, manufacturing/processing, forestry/mining, telecommunications and upstream oil/gas industries were more likely to receive invitations to drink regardless of who issued the invitation.
- Work design characteristics related to increased alcohol use among Alberta workers included:
  - Travelling for work (2002 and 1992)
  - Working at a remote jobsite (2002 and 1992)
  - Working long hours including overtime (2002)
  - Work that involved entertaining or being entertained by clients, suppliers or other business contacts (2002).

- No significant relationship was revealed between alcohol/illicit drug consumption at work or prior to coming to work and job stress, perception of a job as a career and job satisfaction.

## ILLICIT DRUGS

- While only one percent of employees reported their own drug use at work, one in 10 (9%) reported that street drugs were used in their workplace.
- More employees reported street drug availability near the workplace (26% up from 20% in 1992).
- Most employees did not agree (90%) that street drug use was a socially acceptable activity within their workplace.

## TOBACCO USE

Half (53%) of employers reported permitting tobacco use on the premises. This situation occurred most often in industries with outdoor workers (forestry/mining, construction, agriculture and upstream oil/gas) and in blue-collar occupations (primary occupations, construction, transportation, materials handling and processing). It occurred least often in the public sector (hospitals/health care, education, social services, public administration) and in white-collar occupations (manager/professional, clerical office).

## GAMBLING

- Less than one-quarter (22%) of workers regularly gambled together after work in 2002.
- Gambling after work or with co-workers was relatively infrequent across all industries and occupations.
- One quarter of employees (23%) and one-third of employers (35%) agreed that gambling was a socially acceptable activity within their workplace.
- Invitations to employees to gamble were rare by co-workers (6%), supervisors/managers (3%), customers/clients (2%) or suppliers (1%) and these invitations varied little by industry and occupation.

# IMPACTS AND COSTS OF SUBSTANCE USE IN THE WORKPLACE

The impacts of problem gambling and substance abuse in the workplace include but are not limited to employee attendance, company productivity and safety in the workplace. Since the strength of the Alberta economy is tied to the skills and productivity of the workforce, actions to deal with problem gambling and workplace substance abuse must be based on reliable and current information. Employees, employers and unions were asked about the seriousness of employee substance use and gambling for their organization and industry (see Table 14), as well as impacts of employee substance use and gambling. The cost of substance use and gambling to employers was calculated from employee reports of missed work and/or working at reduced capacity.

**TABLE 14: EMPLOYER PERCEPTIONS OF SERIOUSNESS OF EMPLOYEE TOBACCO USE, ALCOHOL USE, ILLICIT DRUG USE AND GAMBLING: 2002 AND 1992**

| TYPE OF PROBLEM | EXTREMELY/MODERATELY SERIOUS | |
|---|---|---|
| | 2002 | 1992 |
| **EMPLOYEE USE IN ORGANIZATION** | | |
| Alcohol | 20% | 10% |
| Illicit Drugs | 13% | 7% |
| Tobacco | 31% | N/A |
| Gambling | 9% | N/A |
| **EMPLOYEE USE IN INDUSTRY** | | |
| Alcohol | 32% | 36% |
| Illicit Drugs | 18% | 19% |
| Tobacco | 36% | N/A |
| Gambling | 14% | N/A |

- When asked about the seriousness of employee alcohol, illicit drugs, tobacco use and gambling for their organization and industry (see Table 14),
  - employers were more likely to identify employee tobacco use as a problem followed by alcohol, illicit drugs then gambling for both their organization and industry
  - these issues were more likely to be identified as concerns for the industry rather than the organization
  - employer concerns about alcohol and illicit drug use have grown since 1992 for the organization but not for the industry

- Employers and unions differed in their concerns regarding the impact of employee alcohol and illicit drug use. While the order of concerns remained the same for each group since 1992, the degree of concern shifted with employers becoming less concerned about these issues and unions becoming more concerned.

  Employers were concerned about the impact on

  - organizational reputation (34% down from 52% in 1992)
  - public image (33% down from 51% in 1992)
  - employee safety (27% down from 45% in 1992)

  Unions were concerned about

  - employee safety (77% up from 62% in 1992)
  - co-worker safety (74% up from 62% in 1992)
  - employee health (69% up from 58% in 1992)

## ALCOHOL AND ILLICIT DRUG USE

- Very few employers (1%) or unions (1%) reported awareness of incidents during the previous month in which employee alcohol or illicit drug use resulted in employee injuries and/or injuries to co-workers or others.
- Very few employees reported any work-related problems associated with alcohol use (1%) or drug use (0.2%). Of those few who reported issues, the most common included
  - missing a day of work (39%)
  - arriving late for work (23%)
  - working at less than their normal capacity (23%)
- Union representatives were more likely than employers to report awareness of work-related incidents linked to alcohol and illicit drug use among members for the following:
  - missing work (50% of unions; 16% of employers)
  - arriving late for work (49% of unions; 15% of employers)
  - working at a slower pace (23% of unions; 10% of employers)
- The most common employer reported organizational costs associated with employee alcohol and illicit drug use included
  - lost production due to absenteeism (27% up from 22% in 1992)
  - cost of temporary workers (18% up from 8% in 1992)
  - wages paid to absent workers (15% down from 16% in 1992)

## GAMBLING

- Very few employees reported that they had experienced any work related problems as a result of their gambling (0.1%); missed work due to their gambling (0.1%) or come to work but operated at less than 50% capacity due to their gambling (0.2%).
- Neither employers nor union representatives were very concerned about the effects of gambling on the workplace. Union representatives (28%) were more likely than employers (14%) to express concern about the negative impacts of worker gambling on organization/union image.

## TOBACCO USE

- Employers reported the following work-related issues associated with employee tobacco use:
  - arriving late for work and/or taking too many breaks due to smoking (19%)
  - smoking on the job in an area not permitted (11%)

## COSTS OF SUBSTANCE USE AND GAMBLING

- Table 15 details hours lost and financial cost estimates based on employee reports of missed days and lost productivity (days working at less than 50% capacity) that were applied to average number of hours worked weekly and average wage within Alberta's workforce for 2002.
- The cost to employers for missed days and lost productivity due to employee gambling and use of alcohol and other drugs was $74 million.
- Alcohol use among employees was substantially more costly to employers than illicit drugs or gambling.

**TABLE 15: TOTAL ESTIMATED HOURS LOST AND FINANCIAL COST DUE TO MISSED DAYS AND LOST PRODUCTIVITY FROM ALCOHOL, DRUG USE AND GAMBLING: 2002**

| ACTIVITY | Impact due to missed days | | Impact due to lost productivity | | TOTAL | |
|---|---|---|---|---|---|---|
| | $ Million | Millions of hours | $ Millions | Millions of hours | $ Millions | Millions of hours |
| Alcohol | $18.59 | .971 | $32.59 | 1.702 | $51.18 | 2.673 |
| Drug Use | $2.49 | 0.130 | $13.15 | 0.687 | $15.64 | 0.817 |
| Gambling | $0.24 | 0.012 | $7.00 | 0.365 | $7.24 | 0.377 |
| TOTAL | $21.32 | 1.113 | $52.74 | 2.754 | $74.06 | 3.867 |

- This cost estimate, based on employee information, is not comprehensive. It does not include other costs such as costs to employers to replace missing workers, additional staff time or overtime to make up lost productivity, workplace incidences such as accidents that injure workers or damage property, higher insurance rates, lost production/sales, and/or medical costs covered by the health system.

# RESPONSES AND PROGRAMS TO MITIGATE EMPLOYEE SUBSTANCE USE AND PROBLEM GAMBLING

Organizations and industries can respond to employee substance use in a number of ways including dealing directly with the employee involved using a variety of measures and/or by providing services and programs for the employee. Employers and union representatives were asked about how they would respond to an employee with a substance use or gambling problem. Questions included the organization's typical response or disciplinary reaction to a first time incident involving employee substance abuse or gambling problem, as well as treatment of an employee with an ongoing substance use or gambling problem. Employees were asked about their reactions to co-workers with substance abuse or gambling problems.

Employers and unions were also asked about the provision of support programs such as employee assistance programs (EAPS) or member assistance programs (MAPs) to deal with substance use among employees.

The 1992 research suggested that the existence of formal policies in the workplace heightens awareness of problems with substance use. Employers and unions in the 2002 study were asked about the existence of formal policies for alcohol and illicit drugs. New questions were asked about tobacco policies. Questions about alcohol and illicit drug testing were also explored in this research.

Finally, employees, employers and unions were asked about who should be involved in addressing substance use and gambling in the workplaces and how these issues should be addressed.

### *Responses to Employee Substance Use/Gambling*

- Typical organizational responses or disciplinary reactions by employers to employee incidents involving alcohol or illicit drugs remained relatively unchanged since 1992. More severe disciplinary consequences were reported for incidents affecting health and safety.
  - Employee dismissal would be used by employers for accidents where alcohol or illicit drugs involved injury to someone (56% of employers) or damage was done to property (37%).
  - Suspension (43%) or warnings (42%) would be given to employees arriving to work drunk or high.
  - Warnings would be given if employees arrived for work "hungover" (70%) or for near misses involving alcohol or illicit drugs (45%).
- Responses to employees requiring treatment for substance use varied.
  - Unions were more likely than employers to offer sick leave with full pay (51% down from 65% in 1992) and sick leave with partial pay (34% up from 18% in 1992).

  - Employers were more likely to offer short-term sick leave without pay (50% up from 35% in 1992) and less likely to dismiss an employee (11% down from 20% in 1992).
  - Unionized organizations were more likely to offer sick leave with full pay (45%) compared to non-unionized organizations, which were more likely to offer short term leave without pay (57%).
  - Organizations with the most employees (500+), the highest operating budgets ($100 million or more) and whose headquarters were located outside of Canada were more likely to offer sick leave with partial pay or full pay.
  - Organizations with the smallest budgets and least number of employees were more likely to offer short-term leave without pay or dismiss the employee.

- Employees reported not enabling the problematic behaviour of co-workers with alcohol or illicit drug problems. Very seldom would employees help co-workers avoid getting caught (1%) or do their work for them (0.3%). Most would
  - give the person advice on dealing with his or her problem (45%)
  - report the person to a supervisor (27%)
  - suggest the person get help from outside the corporation (21%)

*Employee Assistance Programs (EAPs)/Member Assistance Programs (MAPs)*

- EAP and MAP availability has increased since 1992 and unions were more likely than employers to report such programs.
  - employer reports of EAPs (28% up from 9% in 1992)
  - employer reports of MAPs (13% up from 8% in 1992)
  - union reports of EAPs (90% up from 72% in 1992)
  - union reports of MAPs (41% compared to 43% in 1992)

- Self-referrals were the most common type of referrals to an EAP in 2002.
  - self-referrals (88% down from 92% in 1992)
  - referral by a supervisor (60% down from 93% in 1992)
  - co-workers or other person's referral (37% down from 67% in 1992)

- MAP referrals originated more often from union representatives (63%) than supervisors (17%) or self (13%).

- Employers' reports of availability of EAPs and MAPs varied by industry.
  - White-collar industries, such as education (78%), public administration (56%), finance/insurance/real estate (50%) and social services (50%), were more likely to report having EAPs.
  - Industries least likely to have EAPs were other services (5%), telecommunications (13%), manufacturing (15%), agriculture (17%) and wholesale/retail trade (19%).

- Larger organizations were more likely than smaller organizations to provide EAPs. This may be due in part to the fact that larger companies also tend to have more formal policies and collective agreements and more access to resources to provide such services.
- Reasons for not providing EAPs/MAPs included:
  - Employers thought their organization was too small (59%) or they did not need one (54%).
  - Unions reported they were too small (23%) or they could not afford it (20%).
- Most employees (92%) and union representatives (83%) considered their EAP as effective in dealing with substance abuse/gambling issues.
- EAPs were seen as effective by those individuals who would most likely need them.
  - 92% of drinkers reported EAPs would be effective in addressing drinking problems.
  - 86% of drug users reported EAPs would be effective for drug use issues.
- Employee knowledge of where to seek assistance for substance use problems varied considerably by:
  - Size of firm – Employees of smaller sized companies (54%) were not as aware as those of larger companies (86%) of where to seek assistance for alcohol and illicit drug problems.
  - Industry – Employees in upstream oil/gas and utilities industries had the highest level of awareness (95%). Less than three quarters of those employees in construction (73%), other services (71%) and wholesale/retail (70%) knew where to seek assistance.

### *Formal Policies and Alcohol and Illicit Drug Testing*

**TABLE 16: EXISTENCE OF FORMAL POLICIES AND ALCOHOL/DRUG TESTING: 2002 AND 1992**

| TYPE OF POLICY | Employers | | Employees | | Unions | |
|---|---|---|---|---|---|---|
| | 2002 | 1992 | 2002 | 1992 | 2002 | 1992 |
| Alcohol policy | 61% | 26% | 72% | 33% | 80% | N/A |
| Drug policy | 60% | | 75% | | 79% | N/A |
| Tobacco policy | 50% | N/A | 68% | 50% | 64% | N/A |
| Gambling policy | 11% | N/A | 24% | N/A | 25% | N/A |
| Alcohol or Illicit Drug Testing | 8% | 1% | N/A | N/A | 29% | 5% |

- Formal policies on alcohol and illicit drugs were more common in 2002 than in 1992 as reported by both employers (60% up from 26% in 1992) and employees (72% up from 33% in 1992).
- Policies on alcohol and illicit drugs were more common than tobacco or gambling policies.
- Unions were more likely than employers to report the existence of formal policies on alcohol, illicit drugs, tobacco and gambling.

- Organizations with the largest number of employees, highest operating budgets and headquarters located outside of Canada were more likely than other organizations to have formal policies on alcohol, illicit drugs, tobacco and gambling.
- Alcohol and drug policies varied by industry, however, no clear sector patterns emerged.
  - Industries more likely to have alcohol and illicit drug policies included forestry/mining, upstream oil/gas, education, transportation, social services and construction.
  - Industries least likely to have such policies included utilities, public administration, other services, and wholesale and retail trade.
- White-collar sectors (education, hospitals/health care, social services, public administration, finance/insurance/real estate) were more likely to have tobacco policies compared to those in resource or labour-based sectors (utilities, agriculture, transportation, wholesale/retail trade).
- The most common policies reported by employers were the same in 2002 as in 1992.
  - prohibition of alcohol/illicit drug use across the organization (84%)
  - provision of a smoke free workplace (72%)
  - progressive discipline to deal with substance use problems (68%)
- The most common policies reported by union representatives were
  - provision of sick leave for employees undergoing treatment (87%)
  - prohibition of alcohol/illicit drug use across the organization (83%)
  - progressive discipline to deal with substance use problems (78%)
  - provision of a smoke-free workplace (78%)

### *Alcohol and Illicit Drug Testing*

- Alcohol and illicit drug testing have grown since 1992:
  - More employers reported that their companies had an alcohol or other drug-testing program (8% up from 1% in 1992).
  - More unions reported that alcohol or other drug testing was conducted in workplaces where they had members (29% up from 5% in 1992).
- The most common use of testing for alcohol and/or illicit drugs were
  - testing after an accident
  - testing on referral by a supervisor
  - testing after a near miss
  - pre-employment testing
- Industry variations existed for drug testing. Safety-sensitive industries were more likely to have drug testing: forestry/mining (75%), upstream oil/gas (46%), transportation (33%) and construction (23%).

- Of the 8% of employers who reported testing, one-third reported that testing was effective for
  - alcohol use problems in the workplace (32% up from 10% in 1992)
  - drug use problems in the workplace (37% up from 27% in 1992)
- Organizations with 500+ employees, the highest operating budgets and headquarters located outside of Canada were more likely than other organizations to have alcohol and/or illicit drug testing.

### *Suggested Responses to Alcohol and Illicit Drugs in the Workplace*

- Employers and union representatives were asked to identify the actions that had worked best for their organizations in responding to alcohol, illicit drug and gambling problems in their workplace. Employers identified
  - prevention strategies such as the promotion of tobacco-free (38%), drug-free (32%) or alcohol-free (29%) workplaces through the media
  - opportunities to undergo residential or outpatient treatment (31%)

  Union members identified
  - treatment options such as the provision of opportunities to undergo residential (89%) or outpatient treatment (78%) for alcohol and illicit drugs
  - provision of other information on alcohol and illicit drug use in the workplace (81%)
- When asked who should be involved in dealing with alcohol and illicit drug problems in the workplace, employers and union representatives reported
  - employers should be involved (82% of employers and 87% of union representatives)
  - employees should be involved (67% and 67%)
  - medical/health care professionals should be involved (55% and 76%)
- On the question of who should take the lead role in dealing with these workplace problems, the most common responses were that
  - employers should take the lead role (43% of employers and 23% unions)
  - leadership should be a collaborative effort (19% of employers and 33% of unions)
- When employees were asked how their workplace could be changed to reduce substance use and gambling, the most common response was nothing needed to be done because employees were satisfied with current policies for alcohol and illicit drugs (36%), tobacco use (32%) and gambling (41%). Suggested ideas for change included the following.

*Alcohol and Illicit Drugs*

- Improve or make policies restricting usage (11%).
- Offer workshops, education or meetings to create awareness (11%).
- Reduce stress levels and workloads or offer wellness activities (7%).
- Offer assistance programs/counselling (7%).

*Tobacco*

- Make workplace smoke-free (15%).
- Ban smoking on company property (11%).
- Offer programs to assist workers to stop smoking (8%).
- Create zero-tolerance smoking policy (7%).

*Gambling*

- Create policies restricting gambling (16%).
- Offer workshops to create awareness (12%).
- Offer EAP/counselling (7%).
- Improve/enforce existing policies (6%).

# DISCUSSION

The data gathered from employees, employers and unions in the AADAC *Substance Use And Gambling in the Alberta Workplace, 2002: A Replication Study* provides current information on substance use and gambling in the Alberta workplace.

### *Alcohol Use*

Alcohol prevalence among Alberta workers remains unchanged in the 10 years since 1992. Alcohol use and the rate of heavy drinkers did not change over time. The shift to less frequent drinking and decreased availability of alcohol in the workplace reflect changing norms of alcohol use in Alberta. Although the majority of Albertans do not engage in harmful drinking nor drink while at work, those who do so are of concern in the workplace.

### *Illicit Drug Use*

The same can be said of illicit drug users. The majority of Albertans do not engage in drug use or use at work. Cannabis use has increased; other illicit drug use has not. The increased cannabis prevalence may reflect changing attitudes in Canadian society.[14] Those few Albertans who engage in problem drug use or use at work remain of concern to the Alberta workplace.

### *Tobacco Use*

The daily smoking rate among Alberta workers was higher than reported by the Canadian Tobacco Use Monitoring Survey. Tobacco outranked alcohol, illicit drugs and gambling as a serious concern for the workplace. Public sector workplaces have implemented policies to address tobacco use in the workplace, led mainly by white-collar occupations. Some productivity impacts associated with tobacco use were reported in the study; however, these were not included in the calculation of costs of substance use. Future research will need to include these costs to provide a more accurate picture of the impact of tobacco use in the workplace.

### *Gambling*

Prevalence rates for non-problem, low risk and moderate risk gambling in this study were lower than for other studies, however this may be related to differences in measurement. The problem gambling rate is consistent with other research. Problem gambling by employees did not appear to be of major concern to Alberta employers.

### *Industry and Occupation*

Ranking industries and occupations by substance use allows identification of groups that were doing well with regard to substance use and/or gambling as well as those that reported higher than average substance use/gambling. Workers in the agriculture, social services and education industries, and the

14 Canada.Parliament. Senate. Special Committee on Illegal Drugs. (2002). Cannabis: Our position for a Canadian public policy. Report of the Senate Special Committee on Illegal Drugs: Summary Report..

primary and manager/professional occupations reported lower than average rates of gambling and use of alcohol and tobacco. Monitoring these groups over time will determine the effectiveness of their efforts to maintain these lower than average rates.

### *Groups of Concern*

Groups identified as having higher than average rates of use for more than one category of substance use/gambling include construction, utilities, forestry/mining, wholesale/retail trade, public administration and finance/insurance/real estate industries and the construction and materials handling occupations. The construction and transportation industries, and the construction and transportation equipment operating occupations reported higher than average tobacco use and moderate/heavy smokers.

### *Demographic and Environmental Work Factors*

In general, some of these at-risk industries and occupations have higher concentrations of young males, the demographic group profiled as at-risk for substance use. Their work may involve environmental factors associated with higher rates of substance use (e.g., travel, working long hours, working at remote sites and work that involved entertaining or being entertained by clients). The safety-sensitive nature of many at-risk industries and occupations heightens concerns that substance abuse or use while at work may have serious implications for job performance and safety.

### *Workplace Safety*

Despite widespread concern about substance use in the workplace, it is not clear how many workplace incidents/fatalities involve substance use. Less than 1% of employers and unions in this study reported awareness of injuries involving alcohol or illicit drug use during a one-month period, a statistic that did not change over 10 years. Alberta Human Resources and Employment, Workplace Health and Safety, has been gathering statistics on workplace fatalities involving alcohol or illicit drugs since 1979. The most recent information (1992) suggests that only a relatively small percentage of fatalities involve substances, that these are more likely to involve alcohol (11%) rather than illicit drugs (6.7%), that only cannabis had been detected in workplace fatalities involving drugs, and, finally, that there is no indication that the substance used caused the accident.[15] Alberta workers are more likely to be killed in motor vehicle accidents involving alcohol (17%).[16] Notwithstanding the available evidence of limited involvement of substance use in workplace fatalities, there are significant economic costs associated with alcohol and illicit drug use to the Alberta economy and the majority of these costs are associated with alcohol use.

### *Workplace Norms*

While workplace norms have changed since 1992, with less alcohol available in the worksite and fewer people drinking at lunch or after work, alcohol remains available near the worksite and invitations to drink by co-workers and managers have increased. Given the evidence from the literature that perceived drinking by co-workers and heavy alcohol use are predictors of work-

15 Alberta Human Resources and Employment. (June 1992). Workplace Health and Safety: General Health. Edmonton, AB: Alberta Human Resources and Employment.
16 Alberta Human Resources and Employment, June 1992.

related drinking,[17] additional prevention initiatives to address existing workplace norms may be needed for at-risk industries/occupations.

### *Concerns and Responses*

While employers were increasingly concerned about employee substance use as a serious issue for their organizations, they were more concerned about these issues for their industry and less concerned about the impacts of substance use in the workplace. These shifts may be partially explained by the steps that have been taken to begin to address substance use in the workplace since 1992, including significant increases in formal policies to deal with substance use and increased access to EAPs/MAPs. While drug testing has also increased since 1992, research suggests that it is only one small part of a comprehensive program that should involve written policies, employee involvement, substance use awareness and education, supervisor training, and treatment.[18] Responses to employee substance use varied by size of organization, with larger organizations more likely to have formal policies, alcohol/drug testing, access to EAPs/MAPs and support for employees requiring treatment.

The use of alcohol, illicit drugs and gambling are complex behaviours, deeply ingrained and, in varying degrees, legitimized in our society. The effects of misuse and abuse of these substances are similarly complex. They are felt and observed in a multitude of ways, direct and indirect, short and long term, alone and in combination with many other factors in all parts of our lives. Since many Albertans spend most of their waking hours at work, the cultural norms that prevail in the environment can encourage or restrain workplace substance use.[19]

17 Ames & Grube, 1999.
18 Gerber & Yacoubian, 2002; Alberta Alcohol and Drug Abuse Commission, (2003). Position on Employment-Related Alcohol and Drug Testing. Edmonton, AB: Alberta Alcohol and Drug Abuse Commission.
19 Ames & Grube, 1999.

# CONCLUSION

Alberta is a dynamic province, having experienced dramatic change in the decade from 1992 to 2002.[20] The population grew to 3.1 million people, approximately 43,000 new jobs were created annually, and total economic productivity increased at an annual rate of 1.26 per cent, the highest in Canada. Alberta experienced strong growth in small businesses, manufacturing and business services, the information and communication technologies industry, as well as financial services and real estate sectors. Alberta's economic growth and diversification since 1992 outperformed both the national and American economies.[21]

## *Prevalence and Patterns of Substance Use and Gambling*

In the context of this growth scenario, the Alberta workforce remained relatively healthy in 2002 with regard to substance use and gambling. Since 1992, alcohol prevalence rates remained the same, at-risk drinking patterns did not change, illicit drug use increased slightly but only among cannabis users, drug use at work and problem drug use was low. New measures for gambling do not suggest that problem gambling differs from those found in the general population. Taken together the data indicate that the extent of the issue in Alberta is limited. However, ongoing vigilance will be necessary to maintain the generally low prevalence rates for at-risk use and use at work given the potential for safety and productivity impacts across the workplace.

## *Industry and Occupation Variations*

Substance use and gambling varied according to industry and occupation. A number of groups reported lower than average rates of alcohol and illicit drug use indicating that, within particular industries and occupations, substance use issues have been relatively well managed. Yet substance use concerns still exist within certain industries and occupations. Of most concern are the industries and occupations whose workers engage in substance use at work or at-risk use as well as those groups with multiple substance use and or gambling issues. For example, the construction industry and occupation had higher than average numbers of at-risk drinkers, drug users and heavy smokers. These multiple concerns are not surprising given the correlations identified in the 2002 study between alcohol, illicit drugs, tobacco and gambling, as well as profiles of those most likely to engage in at-risk use.

## *Costs*

Even by conservative measures, the economic costs related to substance use among Alberta workers are substantial—$74 million. Most of this amount ($51 million) is attributable to sub-par performance or lost productivity due to workers' use of alcohol. A smaller but significant portion of

20 Alberta Economic Development. (2003). Highlights of the Alberta Economy: Spring 2003. Edmonton, AB: Alberta Economic Development.
21 Alberta Economic Development, 2003.

the overall costs can be attributed to illicit drug use ($15 million) and gambling ($7 million). These costs are not comprehensive and do not include other costs such as replacing missing workers, health care costs and lost production/sales.

### *Responses to Substance Use and Gambling*

Given the considerable costs and complexity of substance use and problem gambling among Alberta workers, responses to the issue should continue to be comprehensive and evidence-based. Industry and unions have shown considerable leadership in taking on the challenge of substance use in the workplace since 1992 by implementing policies and practices, the effectiveness of which are evident in changing workplace norms and increasing availability of programs/supports for substance use issues. Initiatives such as that taken by the Construction Owners Association of Alberta[22] confirm that industry groups are taking important steps to address potential substance abuse and safety concerns. The study identified that policies and support programs were more available in larger organizations. Given the substantial growth of small businesses in Alberta, opportunities exist to enhance workplace policies and supports for this sector.

AADAC has worked closely with ministries, business, industry, communities, other governments/public institutions, employees and other stakeholders since the 1992 workplace study to develop information, treatment and prevention programs and policies to address substance use in the workplace.[23] Industries and occupations identified as having higher than average rates of substance use and/or gambling, substance use at work and/or at-risk use in 2002 may want to explore contributing factors and continue to work with existing supports and programs to enhance the health and well-being of their employees.

### *Future Directions*

The 2002 AADAC Workplace Replication study provides a baseline for future monitoring of trends in substance use and gambling among Alberta workers. Although substance abuse and problem gambling are not widespread, for a minority of workers in the Alberta labour force these activities constitute a significant problem, and for employers they comprise an important issue with considerable associated economic costs. The results speak to the need for ongoing monitoring of these issues within an ever-changing economy. Opportunities exist to undertake further health and safety enhancing initiatives addressing substance use and gambling in the workplace. Overall, this research indicates that sustained vigilance and continued collaborative efforts may serve as guiding principles toward supporting the health, safety and productivity of Alberta workers with respect to substance use and problem gambling.

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22 Construction Owners Association of Alberta. (1999). Canadian Model for Providing a Safe Workplace: A Best Practice of the Construction Owners Association of Alberta. Edmonton, AB: Construction Owners Association of Alberta.

23 See Workplace Information Series published by the Alberta Alcohol and Drug Abuse Commission.

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# APPENDIX A: MEMBERS OF THE ADVISORY COMMITTEE

| | |
|---|---|
| Peter Dunfield | Workers Health and Safety, Senior Loss Management Advisor, Corporate Loss Management, Syncrude Canada Ltd., on behalf of the Construction Owners Association of Alberta |
| Kevin Flaherty | Executive Director, Alberta Workers' Health Centre |
| Susan Hutton | Research Officer, Research Services, AADAC |
| Shelley Jodoin | Labour Liaison, Alberta Workers' Compensation Board |
| Gord Munro | Research Officer, Research Services, AADAC – Chair of Committee |
| Christy Nickerson | Research Officer, Information Services, AADAC |
| Diane Paul | Senior Manager, Economic and Demographic Analysis, Alberta Human Resources and Employment |
| Corinne Pohlmann | Director, Provincial Affairs Alberta/NWT, Canadian Federation of Independent Business |
| Edward Sawka | Director, Research Services, AADAC |

*The assistance provided by the Advisory Committee is gratefully acknowledged, as is the support of the Advisory Committee by R.A. Malatest & Associates.*

# APPENDIX B:
# SUBSTANCE USE AND GAMBLING BY INDUSTRY AND OCCUPATION

**ALCOHOL USE AND ILLICIT DRUG USE, BY INDUSTRY, ALBERTA, 2002 & 1992**
**TOBACCO USE AND GAMBLING BY INDUSTRY, ALBERTA, 2002**

| INDUSTRY | Alcohol Prevalence 2002 | Alcohol Prevalence 1992 | Alcohol at Work 2002 | At-risk Alcohol Use (AUDIT) 2002[§] | Illicit Drug Prevalence 2002 | Illicit Drug Prevalence 1992 | Tobacco Prevalence | Moderate/ Heavy Smokers | Gambling Prevalence |
|---|---|---|---|---|---|---|---|---|---|
| Agriculture | 61% | 73% | 11% | -- | -- | 2% | 16% | -- | 52% |
| Construction | 83% | 84% | 9% | 19% | 17% | 10% | 46% | 28% | 68% |
| Education | 81% | 71% | 12% | -- | 6% | 3% | 15% | -- | 55% |
| Finance/Insurance/ Real Estate | 85% | 89% | 22% | -- | -- | 3% | 27% | 10% | 73% |
| Forestry/Mining | 88% | 88% | -- | -- | -- | 10% | 29% | -- | 71% |
| Hospital/Health Care | 85% | 74% | -- | -- | -- | 3% | 25% | 10% | 75% |
| Manufacturing/ Processing | 81% | 81% | 10% | 10% | 14% | 8% | 32% | 16% | 69% |
| Other Services | 80% | 78% | 18% | 14% | 13% | 5% | 32% | 14% | 62% |
| Public Administration | 87% | 79% | -- | -- | -- | 5% | 24% | -- | 74% |
| Social Services | 73% | 75% | -- | -- | -- | 0% | 16% | -- | 57% |
| Telecommunications | 83% | 77% | -- | -- | -- | 5% | 31% | -- | 68% |
| Transportation | 79% | 79% | -- | 12% | -- | 11% | 36% | 21% | 70% |
| Upstream Oil/Gas | 85% | 92% | -- | -- | -- | 12% | 36% | -- | 67% |
| Utilities | 89% | 83% | -- | -- | -- | 4% | 16% | -- | 83% |
| Wholesale/Retail Trade | 79% | 83% | 7% | 15% | 11% | 7% | 39% | 16% | 67% |
| *Survey Average* | *81%* | *80%* | *11%* | *10%* | *10%* | *6%* | *30%* | *13%* | *66%* |

*-- Too few cases to report*

*§ At-risk Alcohol Use (AUDIT) scores include medium, high and very high risk drinkers.*

## ALCOHOL USE AND ILLICIT DRUG USE, BY OCCUPATION, ALBERTA, 2002 & 1992
## TOBACCO USE AND GAMBLING BY OCCUPATION, ALBERTA, 2002

| OCCUPATION | Alcohol Prevalence 2002 | Alcohol Prevalence 1992 | Alcohol at Work 2002 | At-risk Alcohol Use (AUDIT) 2002[1] | Illicit Drug Prevalence 2002 | Illicit Drug Prevalence 1992 | Tobacco Prevalence | Moderate/ Heavy Smokers | Gambling Prevalence |
|---|---|---|---|---|---|---|---|---|---|
| Clerical/Office | 81% | 82% | 11% | -- | -- | 4% | 27% | 9% | 74% |
| Construction | 80% | 84% | -- | 26% | 27% | 12% | 50% | 32% | 65% |
| Manager/Professional | 84% | 79% | 14% | 6% | 7% | 3% | 22% | 9% | 65% |
| Materials Handling | 76% | 82% | -- | -- | -- | 8% | 52% | -- | 88% |
| Other | 78% | N/A | 9% | 15% | 11% | N/A | 32% | 13% | 68% |
| Primary Occupations | 68% | 76% | 12% | 10% | -- | 4% | 19% | 12% | 65% |
| Processing | 74% | 81% | -- | -- | -- | 13% | 42% | -- | 70% |
| Sales | 81% | 86% | 9% | 14% | 9% | 6% | 40% | 17% | 66% |
| Services | 80% | 74% | 8% | 14% | 13% | 6% | 35% | 14% | 65% |
| Transportation Equipment Operating | 83% | 80% | -- | -- | -- | 10% | 46% | 29% | 52% |
| *Survey Average* | *81%* | *80%* | *11%* | *10%* | *10%* | 6% | *30%* | *13%* | 66% |

*-- Too few cases to report*

[1] *At-risk Alcohol Use (AUDIT) scores include medium, high and very high risk drinkers.*

AADAC

Alberta Alcohol and Drug Abuse Commission
An Agency of the Government of Alberta

For more information, contact your local AADAC office
or call 1-866-33AADAC or visit our Web site
www.aadac.com

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